

CLAIMS:

What is claimed is:

- 1 1. A thermo-plastic container for hermetically sealing a single stack of fragile articles,
2 comprising:
3 a generally tubular body with a central longitudinal axis, said body having
4 a sidewall, a closed end and a hermetically sealable open end; wherein
5 said sidewall includes a flowing geometries mechanism formed therein.
- 1 2. The container of Claim 1 wherein the flowing geometries mechanism comprises at
2 least one lateral flexible hinged area and a weakened panel area.
- 1 3. The container of Claim 2 wherein the panel area has a lateral cross section that is
2 planar.
- 1 4. The container of Claim 2 wherein the panel area has a lateral cross section that is
2 curved.
- 1 5. The container of Claim 2 wherein the panel area comprises a plurality of aligned,
2 non-annular, evenly spaced parallel grooves oriented perpendicular to said central
3 longitudinal axis.
- 1 6. The container of Claim 1 wherein the flowing geometries mechanism comprises at
2 least two flowing geometries mechanisms evenly spaced around the annular
3 periphery of the body.

- 1 7. The container of Claim 1 wherein said sidewall further comprises a structural
2 rigidity mechanism formed therein.
- 1 8. The container of Claim 7 wherein said structural rigidity mechanism comprises a
2 plurality of three-dimensional shapes formed therein.
- 1 9. The container of Claim 7 wherein said structural rigidity mechanism comprises an
2 annular corrugated pattern formed therein.
- 1 10. The container of Claim 9 wherein said annular corrugated pattern traverses about
2 the longitudinal axis of the container in a sinusoidal pattern.
- 1 11. The container of Claim 1 wherein said sidewall further includes a floating panel
2 mechanism formed therein.
- 1 12. The container of Claim 1 wherein said tubular body includes a morphing
2 geometries mechanism formed therein.

1 13. A blow-molded, thermo-plastic container for packaging a single stack of fragile
2 articles, which when hermetically sealed is responsive to forces induced by changes
3 in environmental conditions without detracting from the commercial presentation of
4 the container, said container comprising:

5 a generally tubular body having a central longitudinal axis, said body
6 comprising a sidewall having a plurality of flowing geometries
7 mechanisms formed therein, wherein said sidewall comprises a
8 permanently closed lower base section, a middle section and a
9 hermetically sealable upper section.

1 14. The container of Claim 13 wherein each of said flowing geometries mechanisms
2 comprises at least one lateral flexible hinged area and a weakened panel area.

1 15. The container of Claim 14 wherein the panel area has a lateral cross section that is
2 planar.

1 16. The container of claim 15 wherein the panel area further includes a floating panel
2 mechanism formed.

1 17. The container of Claim 14 wherein the panel area has a lateral cross section that is
2 curved.

1 18. The container of Claim 14 wherein said weakened panel area comprises a plurality
2 of aligned, non-annular, evenly spaced parallel grooves oriented perpendicular to
3 said central longitudinal axis formed therein.

1 19. The container of Claim 14 wherein said lower base and upper sections have a
2 generally circular lateral cross section and said middle section has a generally oval
3 lateral cross section.

1 20. The container of Claim 18 wherein said at least one flexible hinge area comprises a
2 flexible transitional area formed in the lower base section and the upper section
3 whereby the generally circular lateral cross section of said lower base and upper
4 sections transitions to the generally oval lateral cross section of said middle section.

1 21. The container of Claim 19 wherein said flowing geometries mechanism comprises
2 at least two flowing geometries mechanisms evenly spaced around the annular
3 periphery of the body.

1 22. The container of Claim 13 wherein said lower base and upper sections include a
2 structural rigidity mechanism.

1 23. The container of Claim 21 wherein said structural rigidity mechanism comprises an
2 annular corrugated pattern formed therein.

1 24. The container of Claim 21 wherein said annular corrugated pattern traverses the
2 central longitudinal axis at a perpendicular angle.

1 25. The container of Claim 21 wherein said annular corrugated pattern traverses about
2 the central longitudinal axis in a sinusoidal pattern.

1 26. The container of Claim 13 wherein said tubular body includes a morphing
2 geometries mechanism formed therein.